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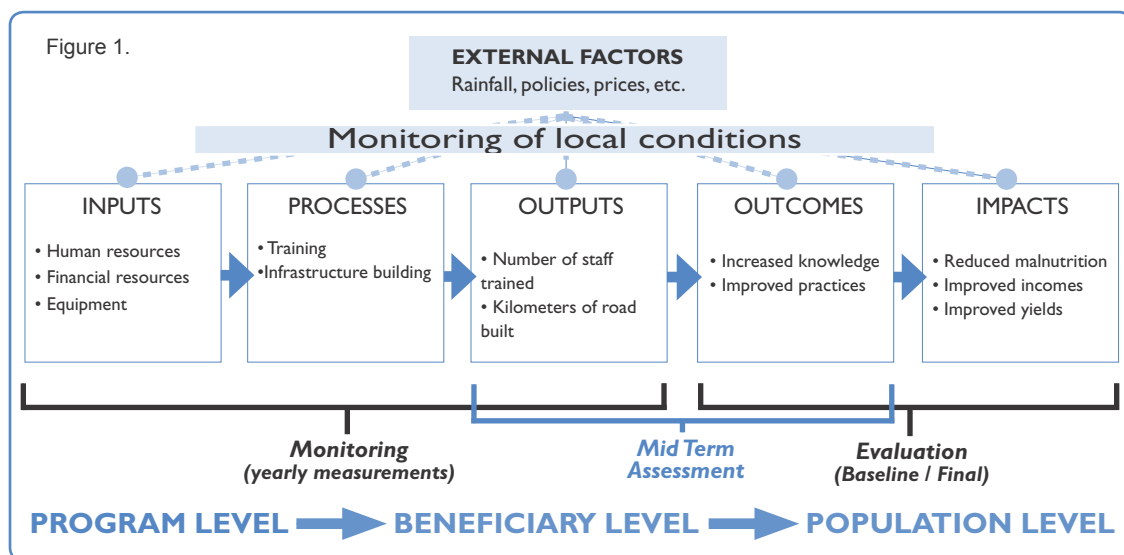
Monitoring and Evaluation Framework for Title II Development-oriented Projects

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All Private Voluntary Organizations (PVOs) submitting a Title II development oriented Multi-Year Assistance program (MYAP) proposal to USAID's Food for Peace (FFP) must include a Monitoring and Evaluation (M&E) plan as part of their submission. The aim of the M&E plan is to "measure the extent to which the activity will result in changes in behavior and well-being at the population level, as well as progress in activity implementation."¹ This Technical Note explains how to frame a Monitoring and Evaluation (M&E) system that fulfills those functions, while maximizing its usefulness to project managers.

Broadly, *monitoring* is defined as the regular collection of information to assess progress in the implementation of the workplan; and *evaluation* as the periodic collection of information to assess progress in changing the practices and well being of target populations. When designed together, these two functions should capture the various moments in the life of the project as resources get transformed into outcomes and impacts.

The sequence, described in Figure 1, generally is as follows: the project first mobilizes a set of *inputs* (human and financial resources, equipment, etc), which it submits to *processes* (training sessions, infrastructure building) that generate *outputs* (e.g. number of people trained; kilometers of road built). *Outputs* in turn translate into *outcomes* (e.g. increased knowledge; improved practices) at the beneficiary level—*outcomes* which, once spread to the rest of the population, result in population-level *impacts* (reduced malnutrition; improved incomes; improved yields; etc.). The M&E system must reflect this sequence closely, using verifiable indicators. In addition, the M&E system should track external factors such as rainfall, policies and market prices in order to warn against, and mitigate the possible negative influence of such factors on local conditions. Having data on such external data will also help put the project into context when explaining results.



¹ USAID, 2005. P.L. 480 Title II Program Policies and Proposal Interim Guidelines, USAID/DCHA/FFP, March 14, 2005, Annex A: p.8.

This is all best illustrated by an example: assume that a project wants to reduce malnutrition in infants and children 0 to 23 months of age. One of the interventions to that end is to promote exclusive breastfeeding and to improve infant and young child feeding practices by counseling mothers to exclusively breastfeed up to 6 months and then continue to breastfeed up to 2 years as well as to gradually feed increasing amount (frequency) with variety of foods. To achieve this, the project identifies resources including funds (*inputs*), mobilizes and trains community health workers, and organizes counseling sessions for mothers of infants and young children 0-23 months on exclusive breastfeeding and appropriate infant and young child feeding (IYCF) practices (*process*). The number of mothers counseled constitutes the *output* of that activity. The number of mothers that adopt exclusive breastfeeding and appropriate IYCF practices for their child (a subset of those who were counseled) is the *beneficiary-level outcome* of that activity. If the practices are deemed beneficial and feasible, counseled mothers will share that knowledge with their neighbors. Once a critical number of mothers adopt the practice, it triggers the widespread adoption of this improved practice among other, non-exposed mothers (*population-level outcome*). This sequence of events is expected to contribute to the project's desired final *impact*, i.e. a population-level reduction in childhood malnutrition.

Such a framework, while simple, provides a powerful means not only to assess progress but also to detect performance bottlenecks and to indicate where to look when obstacles are discovered. For instance, having an indicator of attendance (*output*) will tell whether or not the expected number of mothers actually attended the counseling sessions—if not then clearly little adoption of the practice can take place, so project managers should seek to further find out the reasons for the lack of attendance on the part of mothers so they can remove those constraints. If by contrast mothers come in significant numbers to the counseling sessions but the indicator tracking the adoption of the practice among beneficiaries (*outcomes*) remains unchanged, then project managers must explore what hinders the adoption of that practice (such as: Is there a cultural objection?). Selecting indicators that reflect the critical stages in the project's implementation thus helps identify where further actions or research is needed to correct problems. The exploration of identified bottlenecks can then be pursued through special studies (such as qualitative research).

Box 1: Definitions

Inputs are the set of resources (staff, financial resources, space, project beneficiaries) brought together to accomplish the project's objectives.

Processes are the set of activities (e.g. training, delivering services) by which resources are used in pursuit of the expected results.

Outputs are the products (number of trainees; of immunized children; of meetings held) that result from the combination of inputs and processes.

Outcomes are the set of beneficiary and population-level results (practices, knowledge) expected to change from the intervention.

Impacts are the set of beneficiary and population-level long-term results (improved food security; improved yields; improved nutrition) achieved by changing practices, knowledge and attitudes.

Performance: we use this term in a generic sense to represent the productivity of a project in relation to its objectives; not in terms of a type of evaluation (e.g. we use "impact" or "outcome" evaluation, not "performance" evaluation).

Beneficiaries refer to the portion of the population in the intervention area that receives direct benefits from the program. The "intervention population," by contrast, refers to all people living in the intervention area. They may receive direct or indirect benefits from the program.

Monitoring versus Evaluation

The most important difference between "monitoring" and "evaluation" is in their respective focus: monitoring looks at operational implementation, while evaluation looks at population effects. This leads to a second critical difference, namely the source of the information used by each activity. Most monitoring data are obtained by compiling routine project records. *Outputs*, such as the number of persons trained, can be obtained from attendance lists to a training session. Other data—especially those associated with *outcomes* and *impacts*—require beneficiary or population-level measurements. For example, the number of counseled mothers who adopt a desired practice cannot be derived from routine project records. A survey is necessary to collect this outcome indicator. From an operational point of view, this distinction between sources of data is a second element that distinguishes monitoring from

evaluation: most often, monitoring uses data from project records; evaluation uses survey data.²

A third key difference is in the frequency of data collection and reporting. Monitoring indicators are tracked regularly and frequently—*processes* and *outputs* are compiled on an annual basis; data on *inputs* (especially expenditures in food and cash) are reported on a quarterly basis.³ By contrast, PVOs are required to report evaluation data only twice in the life of the project: USAID FFP's current guidance in this regards is to conduct a baseline survey in Year 1, and to repeat the survey in the penultimate year of the project, to see whether the expected changes in *outcome* and *impact* indicators have indeed occurred during the Life of Activity (LOA). The results of the evaluation are also used to decide whether the project warrants continuation. Such a large time interval in the reporting of *outcomes* and *impacts* is justified first by the fact that *outcome* and *impact* indicators at the population level often take several years to respond to an intervention, thus reducing the usefulness of reporting annually on *effect* indicators; and second, that it would be costly to conduct a population-based evaluation survey every year.

Such a wide time interval in reporting on *outcomes* and *impacts* may however leave project managers unaware of whether or not the

expected *outcomes* are taking place as the activity is implemented: looking only at monitoring data, the project manager may fail to detect poor performance in the adoption of a practice until final evaluation time, when it is too late to make adjustment. Accordingly, USAID also recommends that PVOs conduct a mid-term assessment to verify, as the project proceeds, that the desired *outcomes* are indeed taking place, and to give an opportunity to project managers to adjust project activities and improve implementation in case the expected *outcomes* are not being achieved. In such mid-term assessments, “emphasis should be placed upon the implementation process and effects at the *beneficiary* level.” (USAID, 2005:7) We examine below how to sequence and interpret the various pieces of data produced by the M&E system so it provides the desired information, both to project managers and USAID's FFP. The instrument used to do so is the “Performance Indicator Tracking Table (PITT).”

The Performance Indicator Tracking Table, or PITT

USAID's FFP guidance requires that Title II multi-year development projects use a standardized “Performance Indicator Tracking Table” (PITT) when reporting yearly on their performance. Aside from its administrative function, the PITT provides project managers with a useful management tool that allows

² Those are general principles, meant to convey the overall meaning of M versus E. They are not absolute differences, as some illuminating exceptions show: routine growth monitoring/growth promotion data, for instance, emerges from project records yet it clearly refers to impacts. Likewise, neither is the frequency of data collection a steadfast rule to distinguish M from E, since growth monitoring/growth promotion data can be reported yearly.

³ The administrative reporting that PVOs routinely provide to USAID Missions to account for input flows is beyond the scope of this Technical Note as each PVO has its own system for reporting expenditures to funding agencies.

Example of PITT for a MCHN Project

| INDICATOR | Base Line | YEAR 1 | | | YEAR 2 | | | YEAR 3 | | | YEAR 4 | | | YEAR 5 | | |
|--|-----------|--------|-----|------|--------|-----|------|--------|-----|------|--------|-----|------|--------|-----|------|
| | | Exp | Act | E/A | Exp | Act | E/A | Exp | Act | E/A | Exp | Act | E/A | Exp | Act | E/A |
| Impacts (Data only available for Baseline, Mid-Term and Final Evaluation Years) | | | | | | | | | | | | | | | | |
| % children 0-23 mo under-weight | 34% | | | | 30% | 33% | 91% | | | | 26% | 27% | 96% | | | |
| Outcomes (Data only available for Baseline, Mid-Term and Final Evaluation Years) | | | | | | | | | | | | | | | | |
| % children 0-11 breastfed within 1 hr of birth | 42% | | | | 60% | 65% | 108% | | | | 80% | 82% | 102% | | | |
| % infants < 6 mo exclusively breastfed | 25% | | | | 50% | 58% | 116% | | | | 75% | 75% | 100% | | | |
| % children 6-23 mo continued breastfeeding | 75% | | | | 85% | 91% | 107% | | | | 95% | 97% | 102% | | | |
| % of infants and young children aged 6-23 months fed minimum number of times | 19% | | | | 40% | 21% | 53% | | | | 60% | 51% | 85% | | | |
| Outputs (Data available yearly) | | | | | | | | | | | | | | | | |
| N mothers counseled on appropriate BF pract. | 0 | 200 | 275 | 138% | 300 | 520 | 173% | 400 | 550 | 138% | 400 | 450 | 113% | 300 | 420 | 140% |
| N mothers counseled on appropriate IYCF pract. | 0 | 400 | 485 | 121% | 500 | 620 | 124% | 600 | 630 | 105% | 600 | 591 | 98% | 600 | 650 | 108% |
| N CHWs trained | 0 | 25 | 25 | 100% | 15 | 18 | 100% | 10 | 10 | 101% | 10 | 5 | 50% | 10 | 8 | 80% |

Exp: Expected; Act: Actual; E/A: Expected over Actual; IYCF: Infant and Young Child Feeding; CHW: Community Health Workers; N is number; mo is month; pract. is practices. Mid Term figures are based on a beneficiary survey; Baseline and Final Evaluation values are based on population surveys.

to: examine progress in implementation, assess bottlenecks, and indicate possible next steps in resolving identified constraints. This is again best illustrated by an example. The sample PITT tracks a hypothetical Title II Project featuring a Maternal and Child Health and Nutrition (MCHN) intervention, whose main goal is to reduce malnutrition (underweight) among infants and children 0-23 months of age by exclusive breastfeeding up to 6 months, and use of appropriate IYCF practices between 6-23 months; and by reducing the incidence and severity of childhood diarrhea (proper hygiene in the household, appropriate care of the sick child). These outcomes will be obtained through a Behavior Change Communication (BCC) campaign carried out by project staff, targeting communities and mothers of all children under 24 months.⁴

The *impact* indicator in this program is prevalence of underweight using the weight-for-age Z score indicator and a cutoff of < -2 standard deviations. Data indicate a 34% underweight prevalence at baseline in the population of children less than 24 months. Over the five years of the intervention, the project intended to reduce this level by 2 percentage points per year, down to 26% after four years. Assuming a linear progress towards meeting the target, about half of the reduction should have occurred by the end of Year 2; accordingly, targets for the mid-term evaluation are set at 30%. The mid-term assessment conducted among beneficiaries in that year however shows that prevalence levels have barely gone down since the baseline, when at least a four percentage point reduction was expected. The PITT also points at a low adoption of some of the infant and young child feeding practices advocated by the project: although mothers attended the counseling sessions in the expected numbers, they seemed to have difficulty in providing their children 6-23 months with the appropriate number of daily feedings of solid/semi-solid foods. Assuming this might be a key reason for the low performance of the impact indicator, project managers launched a special qualitative study to explore the problem in details, and eventually learned that mothers were confused by the different messages given to them. Whereas the recommended number of daily feeding of solid/semi-solid foods varies by age group,⁵ CHWs were providing all infant and young child feeding messages at once to all moth-

ers irrespective of the age of their child, which introduced uncertainty in their mind. In response, project managers reorganized the project's training approach, first by increasing community health worker training, and second by targeting mothers according to the age of their child, in order to offer messages that were of immediate relevance to their current situation. These corrections appear to have helped in increasing mothers understanding of appropriate infant and young child feeding practices: in the final evaluation, performance in the indicators associated with feeding practice show substantial improvements from baseline, as does the underweight prevalence (although this prevalence is still below targets at the end of the LOA).

This scenario is obviously a textbook case and things in reality are often more complex yet the example shows how the judicious selection of indicators for the PITT can help project managers detect failures in performance, indicate where to make adjustment to solve those problems, and eventually put the intervention back on track.

Conclusion

Aspects to consider when developing an M&E system include the clear delineation of program objectives and interventions, the careful selection of indicators, the appropriate sequencing of the data collection and compilation process, attention to the quality of the data collected, and sound data analysis and reporting. An important part of this is to understand in which category (input, process, output, outcome, impact) each indicator fits; and to interpret the information generated by the system carefully and meticulously. Ensuring those steps should go a long way towards providing project managers with an M&E system that serves their administrative reporting needs as well as helps them follow implementation progress, detect bottlenecks, provide a diagnosis of the constraints and resolve those constraints before it is too late. An M&E system that fulfills those expectations constitutes a strong asset towards securing the achievement of the project's final objectives.

Related Reading

FANTA Technical Note No. 11, *Evaluating Title II Development-oriented Multi-Year Assistance Projects*

⁴ For ease of presentation, the sample PITT on the previous page presents only the indicators related to infant and young child feeding. To be complete, this PITT should also include the indicators needed to track hygiene and diarrhea management practices, as well as any other action taken by the project to attain its objectives (such as immunization, Vitamin A supplementation, direct distribution of supplementary food, etc.).

⁵ WHO's recommendation is that breastfed children 6-8 months should receive a minimum of 2 daily feedings of solid/semi-solid foods; whereas children 9-23 months should receive a minimum of 3 daily feedings of solid/semi-solid foods. PAHO/WHO (Pan American Health Organization/World Health Organization). *Guiding Principles for Complementary Feeding of the Breastfed Child*. Washington, D.C./Geneva, Switzerland: PAHO/WHO, 2003.



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